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THE ECONOMIC COSTS OF WAR

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There are effects of war which are more tragic than the economic burden it will place on future generations and there are some that are more morally revolting; but there are none which will last longer or do a greater total amount of harm. What we chiefly need to know is in what condition nations will find themselves when they have added, let us say, fifty billions of dollars to their previous debts and have, at the same time, greatly reduced their power to pay debts. Some of the effects of this burden in fettering and crushing the life of the future will transcend all economic measurements, much as do the killing, maiming, and general ravaging that have already gone on. Only the purely economic effects lend themselves to measurement, and a few principles applying to these are what this paper will attempt to state.

War is a stupendous phenomenon of Economic Dynamics, and yet it apparently reverses the ordinary economic processes in a way that should put it beyond the application of the principles of our science. Only in a department of economics devoted to the destruction of wealth and life would it seemingly find a place. For competitive production it substitutes competitive destruction. It depletes shops and crowds barracks, the occupants of which strive to outdo each other in putting out of existence products and producers. Its tools are guns, shells, dreadnaughts, and the like, and its labor is maiming and killing.

It is decapitalization on a vast scale. In place of voluntary abstinence for the benefit of the future it puts a reckless bartering away of the income of the future to make possible a prodigal expenditure in the present. The war fund, when secured, reverses the effect of ordinary capital, in that it is spent at once instead of being embodied in a self-perpetuating fund, and the spending of it intensifies a work of destruction carried on by a kind of human effort which itself is the reversal of ordinary labor. The soldier and his tools are the antitheses of the workman and his tools in their future effects as well as in their present ones, since they reduce the number and efficiency of future laborers who must help to pay the debts now created. Loans for warfare first put a heavy tax on the product of future industry and then destroy much of the power to pay it.

It is all under the sway of a highly organized competition which, in its effect, is the reverse of the ordinary kind. Striving to undersell rivals is striving to promote the welfare of the public more than rivals are promoting it and it does nothing to rivals directly. Indirectly it forces them also to do their utmost to serve the public, and the whole process makes for a fruitful industry now and a more fruitful one hereafter. Competitive maiming and killing blight present and future.

War raises to an extreme limit that discount on future values, or premium on present ones, that has played so large a part in recent economic theories, and that too in spite of the fact that what is sacrificed in the future is the means of maintaining life and welfare and what is secured in the present is the means of destroying both of them. It makes future life-sustaining goods of much less present value than present life-destroying goods. Apparently an amount of suffering and death now is worth vastly more than an equal amount of happiness and life hereafter. Even the honored and lamented Minister von Böhm-Bawerk never postulated that relation of present and future. It is no ordinary economy that would starve men hereafter in order to kill men now.

Is warfare then entirely outside of the realm of true economics? Has the Science of the Organized Production and Use of Wealth no place for the belligerent action which is now going on, and do its principles remain at present largely in abeyance? To say this would imply a highly inadequate view of the scope of our science. Warfare finds a place within it, and the treatment of it falls in one or two generic divisions of Economics as broadly conceived.

There is a place in the science for the private contentions that are involved in defining and vindicating the *ownership* of wealth—that is, in maintaining the institution of property. It is a crude institution in primitive times and is maintained in rough and irregular way. The club of the owner does the work of that of the policeman. International rights today are like the individual rights in their crudest stage and are attacked and defended in a similarly lawless and violent manner. There is a clear analogy between the economic effect of what a savage does in defending his hut and what a nation does in defending its domain.

If we cease to think of nations and look at individuals only, we shall find them doing much which reverses the productive process in the same sense in which warfare does so. Wealth consists in things which are capable of ownership, and in a rude society

ownership is precarious and is preserved by personal vigilance and much fighting. The production of wealth would amount to little if whatever a man might get as his share another could seize with impunity. The effective utility of anything that can be stolen *ad libitum* is practically *nil*, and preventing this nullifying of utility is an operation as truly economic as is creating it.

Over individuals there is now a state with its courts, its legislature, and its police power, which save them from the necessity for much fighting. Over the states themselves, even in what passes for high civilization, there is no such efficient government, and the defense of their territories and other possessions has to be done in the primitive, cave-dwelling fashion and with a vast destruction of life and wasting of goods; and yet this is the only ultimate resource which the world at present has for keeping the lands and goods of nations in that condition of ownership which is necessary in order that their service-rendering powers may be developed.

Nations, indeed, make war in order to extend their sovereignty over new territories, as well as to add to their wealth, and this purpose may be accomplished without directly wresting lands and goods from private owners. Mere addition to their power is one of the purposes in view. The wealth which comes from extending dominions is also a leading object. What is here claimed is that a condition in which national territories were free plunder would make even private property insecure, and that, in their *manner of guarding* what they have of both dominion and property, nations are like men in a low stage of evolution.

It takes no sharpness of vision to see that the possession or control of territory is the leading issue of the present war, and the defense of territory is a latter-day illustration of the violent and costly protective operation which, through many centuries of savage life, made the other economic processes possible. Granted that international law is imperfectly observed and without courts or police for applying and enforcing it, and international *faust recht* becomes, in a broad sense, an unavoidable economic phenomenon, though it is the most wasteful and irrational one that still survives. It falls in that generic division of economic effort which confers on goods the basic quality of appropriability. It is so crude a part of a system of world economics that every discharge of a forty-two centimetre gun calls imperiously for courts and laws of nations which would remand such diabolical agencies to

the limbo of a savage past. Better instrumentalities for accomplishing the same purpose are the supreme need of the world.

We have then to study the cost of performing, in a crude, blundering, and savage way, one of the primary economic functions, and the vast amount of that cost is due, not to the fact that the function is performed, but to the murderous way in which this is done. If it were not done at all—if national possessions had no protection—the state of the world would be even worse than it is. Warfare, though not a reversal of the whole economic process, is such a mode of performing a part of it that, if humanity is incapable of improving on the method, it should surrender its tenancy of the earth and let some other animal type evolve, through the aeons of the future, to a position of supremacy.

Of the economic costs due to war some are incurred while it is in progress and some in the longer intervals of peace. Of those of the former kind—the only one here discussed—some fall first on governments and then on the people, while others fall directly on the people, through the stoppage of production and the direct destruction which campaigns involve. In measuring today the entire effects of the present war on the belligerent countries one would have to ascertain how much wealth they will have left when the war is over and compare it with the amount they would have had if this war had not occurred and the accumulation due to peace had continued. The difference between these gross amounts is chargeable to the war; it can be measured only when hostilities are over and then only approximately.

That which it is most important to know is in what conditions the nations will find themselves if the struggle shall continue for a given period, say a year, longer. Forecasts of this kind, guesses though they be, the nations are compelled in some way to make, and it is these which enter into the problem of offering or accepting terms of peace.

From a moral point of view, and even from a military one, killing men is worse than destroying property; but in a baldly economic calculation it is not so. If war reduced all classes of a population alike, it would, on Malthusian principles, increase the earnings of the surviving laborers. Actually, however, it works selectively, killing and disabling the most productive workers and, by this effect, it will lessen the average *per capita* efficiency of a people. Not till new generations shall mature will this loss be made up. If war reduced capital only and all laborers survived

without injury, the earning power of an individual would be lessened more disastrously than it is. With the reduced capital a shrunk working force can create more wealth *per capita* than the full original number could have done.

War debts will clearly be the greatest economic disaster of the future that will be traceable to the present war. They will burden workers, somewhat through indirect taxes and much more through the prevention of measures of reform and improvement. There is a long list of costly things that labor has already demanded and will insist on when the war shall be over. Interest on debts, war pensions, and further outlays for armies and navies will absorb the greater part of what the countries can afford, and many reforms will have to wait. The states may be unable to pay what they will cost, even though they may be in danger of revolution if they refuse to do it. This evil, like others, will vary directly as the duration of the struggle and the status of humanity for a century will depend on the question how long it will last. Are there any clear economic principles which will determine the length of the war?

The defense of property by club law could not by the most liberal use of terms be rated as a part of a general wealth-creating process unless it were subject to some self-terminating principle. It is worth while to apply a simple formula, suggesting those of Economics, to the problem of fixing a natural period beyond which beings endowed with reason should not be expected to prolong a war.

Earlier wars have often been decided by military genius and high strategy still has its great importance, but if it is true that, in our day, the decisive fact is usually what, by a euphemism, is called "attrition"—the killing and disabling of men and the destruction of resources—we may confine our brief study to a war of this type. Uniform losses on the two sides must increase the preponderance of the one that has the stronger force and the larger equipment. If a million men are a unit and there are a hundred and fifty such units on one side and a hundred on the other, the original preponderance is as three to two, while after each party has lost fifty units the ratio becomes two to one. With only twenty-five more taken from each force it becomes three to one, and it is as five to one after a total loss on each side of eighty-seven and a half. Of course, exactly the same principle applies to a superiority in resources. In the latter stages of a war that

is either long continued or terrifically destructive, a superiority in men and resources will crushingly tell. Can we make a formula indicating at what point the stronger side will be interested in offering terms which the weaker will be impelled by interest to accept? This is equivalent to asking at what point mediation will be certain to be acceptable to both sides.

We have to assume that there are two contending parties in the war and that, at some date, the ultimate decision between them is foreshadowed with a strong probability of correctness. The most uncertain thing which one can attempt to forecast is the outcome of a single battle. Mob psychology may set strength at naught and a battle may be lost by a panic, and even in an extensive campaign chance has its place; but a long war carried on in modern trenches by disciplined troops is far less capricious in its results and, if one can fairly assume anything like equality in the waste of men and munitions, there is a basis for a quasi-economic formula which will express, in terms akin to those of our science, a principle which should determine when negotiations for peace would naturally begin and what would naturally be the terms of settlement, provided always that reason were in control on the two sides.

To make the decision hinge baldly on intelligent self-interest we must partially revive a classical mode of study and use it heroically. We must make one quasi-economic being out of each of the warring nations or leagues of nations in its collective entirety. Each of them must become, as it were, a coolly reasoning organism—a vast composite calculating machine—endeavoring to ascertain what line of conduct will best protect the aggregate of its many and varied interests. This implies that stronger and weaker alike are influenced by nothing except the effect which their action will have on themselves. We leave out of account every sentiment of love or hate, of gratitude or revenge, and consider that regard for justice is qualified to the vanishing point by an assumed right of conquest. The lives of a country's own citizens figure merely as a cost and are weighed against values to be gained. They will be sacrificed if the gain is the greater. The calculation to be made is so pitiless and remorseless that one regards himself as something of a barbarian for making it in theory, and yet it isolates dominant forces which actually will have play in determining the time and the manner of ending the war. If attrition is decisive, a stronger nation or league at war with a weaker one can

ultimately demand in territory or in money whatever its own interest impels it to demand and, whenever the attrition of the war has gone to such a point that both sides have discovered to which of them in the end victory must fall, the terms which the stronger is interested in offering, the weaker is interested in accepting.¹

The most that the prospective victor can, in cool self-interest, ask for is all that he could secure by pushing his conquest to the bitter end minus the cost of so pushing it. The cost is miscellaneous. Life, treasure, future efficiency, both economic and military, are sacrificed by every act of further struggle. Such a grand composite of varied costs has in some way to be roughly computed and deducted from the sum total of varied and miscellaneous gains which a complete conquest would ultimately bring. There is no clear unit of measurement of such composite values—no money for appraising life, health, strength, territory, freedom, and international prestige or dominance. What a people has to do is to decide how powerfully the aggregate of such things appeals to it as a motive for action—how much sacrifice, all in all, it is really worth. It must gauge the importance of all that will happen to it in consequence of continuing to fight and compare it with the importance of what will happen if it stops.

If the victor can secure the terms described, he has nothing to gain by prolonging the struggle. Everything that, by further fighting, he can add to his gains will be neutralized by the cost of it. Whatever he can save in cost he should deduct from the

¹ It is necessary, in war as in business, to act on probabilities instead of on certainties, and the manner in which probabilities are computed, if our time sufficed for it, should be stated. After making an investment a business man knows that his principal may return to him with a surplus or it may have gone from him forever, and it may even have carried more wealth with it. If the chances are even, the prospective gain must greatly exceed the possible loss to make the operation rational. Every diminution of the probability of success greatly increases the gain that the success must promise in order to offset, as a motive, the danger of a given loss. Every increase in the magnitude of the transaction has a like effect. A man would act insanely if he took a chance of losing his entire fortune for the sake of an equal chance of doubling it. The total loss would injure him indefinitely more than the possible increase would benefit him. Nations at war are dealing with the largest values that figure in any transactions. The evil of a crushing defeat is beyond computation and a stray probability of suffering it would in a cool calculation outweigh any gain which a war could well bring. As a rational motive for keeping the peace such a probability approximates a certainty.

terms which, by further fighting, he could ultimately exact, and to do otherwise would mark his conduct as dictated by unintelligent anger or revenge, rather than by self-interest as revealed by rational, even if heartless, calculation.

The weaker party is impelled by interest to accept, the moment they are offered, the terms which the formula yields. If he refuses them, the victor will continue the war and every day will make the terms harder. It will lessen the deduction which the victor is willing to make from the utmost he can finally get. The maximum which he can ultimately exact reduced by the cost of a year of warfare affords for the conquered side a more tolerable basis of settlement than the same maximum minus the cost of only one half-year of warfare, which is what he would be impelled to accept if the struggle should continue for six months longer. At the last possible day of settlement bare self-preservation may become impossible.

It is, of course, perfectly apparent that influences which our formula intentionally omits from the calculation are varied and important. Restoring to the leagues the human qualities that we have, in imagination, taken out of them will make a victor temper the terms offered. The formula defines a savage maximum which might be offered by the stronger and accepted by the weaker if both were dehumanized with heroic thoroughness. Humane impulses are not extinct in international affairs and justice is not dead. "A decent regard for the opinion of mankind" is powerful and the future attitude of a neutral world must be taken into account. An intelligent regard for a long future will rate the good will even of conquered nations as of high importance. All this must moderate the severity of the terms which brute force and crude self-interest would otherwise dictate. And yet even the formula as it stands does less violence to facts than it would if it were applied to individual citizens of a common country. The sovereignty that is over these citizens not only affects their outward conduct but molds their character. Nations are more like "economic men" than men are, and the strong and dominating forces which impel warring nations toward a certain more or less definite line of action need to be isolated and recognized for what they are. Nations do deal with each other on a relatively low moral plane and the future of the world is not unlikely to be gravely affected by titanic forces operating in a savage and crudely calculating way. Within the states justice holds savag-

ery in check and positive institutions make the check effective. As between the states, in a time of peace the checks are inadequate and in a time of war the demons are uppermost. Far otherwise would it be if international laws were clearly defined and generally respected, if there were a court to apply them and a league of nations to give efficiency to the court. So limitless is the improvement of the whole status of humanity which something that looks like a relatively small institutional change would cause. The boundaries of Paradise and Sheol are not far apart and a few steps, that will not be difficult if the nations have the will and the intelligence to make them, will carry humanity from the one realm to the other. Unless states which are separately mighty are collectively imbecile, the difficulties in the way of this consummation will be overcome.